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(Gelatine Print issued only with Imperial Edition.)
Office-Building, Boston, Mass.
The Sassenpoort, Zwolle, Holland.
The Waterpoort, Sneek, Holland.
Two Houses at Pittsfield, Mass.

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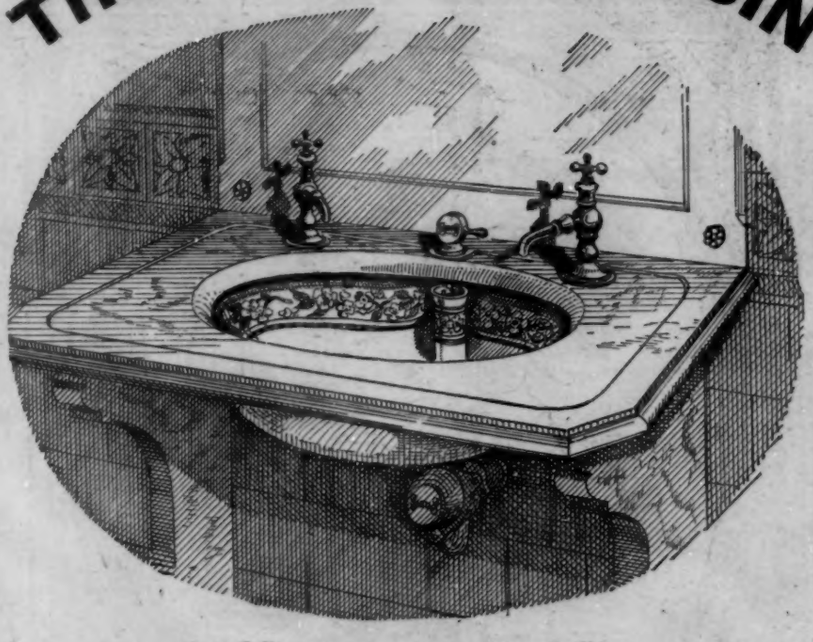

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THE Convention for reorganizing the American Institute of Architects is to take place in a few months, in the City of Cincinnati, and it has been suggested that the two great organizations which are to consolidate may receive new members until that time, who will, by the act of consolidation, become members of the new body. While there may be no practical objection to this, we doubt very much whether it is the best policy for either organization to attempt to carry with it any considerable number of members acquired between the passage of the vote of consolidation and the Convention for carrying the vote into effect. As matters now stand, each of the two great societies knows the names of all the members of the other, and the members of each society are willing to meet all the members of the other as friends and brothers, but we are by no means sure that it would conduce to the harmony of the Convention to have either society find in the assembly-hall on the opening day a large number of new brethren, belonging to the other organization, whom it never heard of before, and did not bargain for in its approval of the reorganization scheme, and who, it might fear, would be utilized to push through measures which would not be approved by the members of the two bodies who have already thoroughly considered and discussed the plan of consolidation. It will unquestionably be just as easy for good architects to enter the new Institute as the old, and in our opinion they would show the best taste by waiting until their new home is open to receive them, and then walking in through the front door, instead of making arrangements to be transferred quietly with the baggage, however earnestly they may be invited to avail themselves of the latter method.

WE never like to appear to meddle in other people's business, or to offer advice beforehand in regard to matters which will be settled at the proper time by the persons whom they principally concern, but in view of the great importance to the profession of the work of the new American Institute of Architects, which is to come into existence in two or three months, and the advantage of as long and free discussion as possible of the questions which will come before it, we feel it rather incumbent upon us to break our rule for once, and to offer with due modesty such suggestions as occur to us, with the hope that some of them may be found useful. In the first place, as the question of selecting a permanent location for the administration of the Institute will probably be among the earliest to be settled, we wish to add something to what we have previously said in favor of the selection of Washington for the purpose. A strong effort will undoubtedly be made to keep the Institute offices in New York, which has so long been the seat of the parent Institute, and where are collected the valuable Institute library, the archives, and the men who have so long and so ably directed the affairs of the elder body; and as the action of the joint committee, in assigning Cincinnati as the place of meeting of the Reorganization Convention, shows that in their opinion, which probably reflects that of the profession in general, no one city, outside of New York, has any preëminent claim to professional favor, the effort is very likely to succeed through the neglect to unite the opposition upon any other location. Now, although we fully appreciate the inconveniences of moving the offices of the consolidated societies away from New York and Chicago, and of selecting new officers who can attend to necessary business outside of those cities, the advantages to be gained by transferring the administration to Washington seem to us to outweigh very greatly the temporary inconveniences. Among these advantages, one of the greatest is the guaranty which the transfer affords of the permanence of the new organization. It is obviously impracticable to make the Institute a peripatetic body; it must have a permanent location, and to fix this location in New York or Chicago would, judging from past experience, inevitably lead in time to the disruption of the new organization into at least two local and independent societies. It is not that New York is situated very far from the geographical centre of the country, for it is at least as convenient a place to go to as any, but, professionally considered, it is a province by itself, inhabited by a strong and active body of men, who extend their activity all over the Union, not always to the advantage of the local practitioners in other communities. We do not for a moment suggest that our architects resent the intrusion of those from other places into their domain; in fact, we know that the attitude of the profession is in this country one of the utmost courtesy toward architects from any quarter; but the fact remains that the architects of Boston, Cincinnati, Indianapolis, St. Louis and Kansas City think of New York as a place so full of enterprising and brilliant members of the profession that the voice of a modest Westerner or Downeaster has not much chance of being attended to. With Washington the case is very different. Not only is the local professional interest very small there, and likely to remain so, but Washington is above all others the Federal city, in which every State has an equal share, and is represented by a delegation of well-known men, bound to claim respect and recognition for their fellow-citizens. In the choice of such a place for permanent administration no offence could be given to any one, and the mutual confidence and harmony which are so essential to the usefulness of the new Institute need not fear disturbance by any local feeling whatever.

IN addition to this, Washington is nearly as convenient a place to go to as New York, and is considerably more central, as well as more interesting, to such trustees or members of committees as may have to make occasional visits to it. The main advantage, however, next to its federal character, of adopting it for the permanent home of the Institute is to bring the principal professional body into closer relation with the principal building-owner in the country, the United States Government. Both for the architects and the public, this is one of the most urgent necessities with which the new Institute will have to deal. As every one knows who has had anything to do with the Government, the public business is managed by human beings who find their private affairs much more interesting than those of the public, and generally get over the latter with as little expenditure of time and trouble as possible. Of all the affairs with which they deal, they probably know least, and care least, about the design and construction of the Government buildings, and the average congressman undoubtedly regards the Government plan-factory, which saves him all trouble of thinking on such matters, as a most commendable device. The permanent presence of the American Institute of Architects in the city, and still more, the holding of the conventions there, would open the eyes of many a senator and representative for the first time to the fact that there were people in the world who made a profession of beautiful building. Discovering that these persons formed a body of considerable importance, the next step for a legislator who wished to introduce a novelty into the appropriation-bill would be to call in, on his way to the Capitol, at the office of the Institute for suggestions, and he would certainly gain some new ideas by doing so. After a considerable number of members of Congress had

done the same, a notion would begin to dawn upon them of the advantages of a great and noble public architecture, which miles of petitions and memorials would fail to produce, and the way would be opened for a most desirable change in the system of Government building. The history of Congressional legislation shows nothing more plainly than that personal contact and pleasant acquaintance counts with our legislators for far more than logic or abstruse principles; and there is no place where an active representative body, visibly occupied in the promotion of the art of architecture, and, let us hope, in the defence of the interests of those who profess that art, would attract more attention than in Washington.

OF all the professional visitors who drop in upon us as strangers and leave us as something less, we have never been more drawn to any than to one who visited us a fortnight ago — a young Englishman who had come on from New York to see what was the nature of the graduating festivities at Cambridge. If ever ocular observation joined to a few moments chat discovered a refined and high-bred nature, such discovery we made in the case of Hubert Westell, and as he left the room we had a distinct feeling that nature had been unusually kind in endowing him with such evident physical and mental vigor while, if his eye was a truthful witness, parents and preceptors had done their work in moulding his moral nature. The strong impression which we felt at the time some might say was a psychological effect and that had we possessed a fully developed nature we might have been able to give a warning that would have prevented one of the most distressing boating casualties of the season. On the Fourth of July, Mr. Westell, in company with another young Englishman, Mr. Wills, was capsized by a squall while boating on the North River. After clinging to the boat for a while they decided to swim for the shore but, alas, only one of them was able to endure the strain. So much distressed with his own efforts was Mr. Wills that he did not know when or where his companion was overcome and so escaped being a helpless witness of a painful scene. Mr. Westell was born in Whitney, Oxon, England, about twenty-four years ago and was, we believe, a graduate from the neighboring university, though as he had been in this country about three years and previous to that had been a student, a favorite one, in the office of Mr. J. M. Brydon in London, perhaps this may not be so. But the fact that he was an Associate of the Royal Institute of British Architects and a winner of the Pugin Travelling-Scholarship is evidence enough of his professional training. A few months ago Mr. Westell formed a partnership with two other gentlemen who like himself had been for some years in the office of Mr. G. B. Post, of New York, and the composition of the firm led one to expect from it work of very unusual excellence. It so chances that it is this week "the turn" for the publication of two designs contributed by the new firm, and as they do not bear the well-known ear-marks of the junior member of the firm, we infer that Mr. Westell himself made not only the drawings but also the designs, which thus give evidence to his ability to treat with refined simplicity a problem that leads so many designers into the paths of mere eccentricity.

MOST persons know something about the Balmain luminous paint, which at one time seemed likely to come into extensive use for brightening the interior of tunnels and other dark places. Although Mr. Balmain probably improved the manufacture of his paint, which is said to have been made of oyster-shells calcined with sulphur, he was by no means the inventor of the luminous compound, which is described at length, with the process of manufacturing it, in an old book which was familiar to our boyhood, and seems, from a curious story which is told about it, to have been known to the Orientals for many centuries. A Chinese legend says that a certain emperor, who reigned about a thousand years B. C., was told one day of a picture, belonging to one of his subjects, which had a remarkable property. The picture represented an ox, and every morning the ox came out of his frame, and went to graze in the meadows, returning at night, to resume his place in the frame, where he remained quietly until the next morning. The emperor caused the picture to be brought to him, and sought in vain for an explanation of the mystery. After the mandarins of the court had exercised their philosophy over it to no purpose, an old priest was found, who remembered that the Japanese had the art of treating oyster-shells in a certain way, and mixing them with various pigments so as to form colors which were invisible by day, but became visible at night. The picture, he suggested, was probably painted with these colors, and as the figure became invisible by daylight, it needed no great credulity — for a Chinaman — to imagine that the animal had temporarily joined the flocks feeding in the neighboring pastures.

A SYNDICATE of five men is said to have secured a monopoly of the spruce for the New York market by buying about half a million acres of land in the Adirondack Mountains, on which is practically all the spruce timber left standing in the State, some seven hundred million feet, according to the estimates. The price paid for the land and timber is said to have been something more than a dollar an acre, and the spruce alone will be worth several times the amount of the purchase-money, while a great deal of hard wood will still remain to be cut and sold. Every one does not know how enormously profitable the cutting of lumber is under the present tariff. The duty on imported spruce is, if we are not mistaken, two dollars a thousand feet, so that the pecuniary value of the advantage which the owners of this tract will enjoy over the Canadian lumbermen, who would probably be their only competitors, amounts to fourteen hundred thousand dollars, or nearly three dollars an acre on their land, which cost them about one and a quarter. Of course, there are advantages to other people besides the lumbermen in the protection which they enjoy, and the tariff has probably done more to open up the forest regions of our Northern States than any other agency, so that we only call attention to the fact of the prosperity of the business, without going into questions of political economy, which are far outside of our province.

LE GENIE CIVIL, in its official capacity as the technical organ of the Paris Exposition, gives many interesting details of the progress of the great show, which seems likely to be the most successful affair of the kind yet undertaken. In the average daily number of visitors, the exhibition of 1889 has so far greatly exceeded that of any previous one. At London, in 1851, the average for several weeks was only about thirty thousand, but it gradually increased to about fifty-six thousand, which was the highest point. In this respect, the next exhibition, that of Paris in 1855, was considerably less successful than that of London, but the Paris exhibition of 1867 somewhat surpassed that of London. The next one, that at Vienna in 1873, had more visitors than the London one, but less than the last one at Paris; and our own, at Philadelphia, was the most successful of any that had been held up to that time. The present show at Paris, however, attracts, so far, many more visitors than even that at Philadelphia, the average of paying visitors during the first week, exclusive of Sunday, having been about seventy thousand, while fourteen thousand more, holding season-tickets or free passes, passed through the gates daily. On the first Sunday, however, the number of persons passing the turnstiles was two hundred and seventeen thousand, two hundred and sixteen, which brings the average for the week up to ninety-one thousand per day. It seems likely that these averages will be much exceeded later, as the railways will soon begin running excursion trains at low fares. Although everything is not yet completely in order, there are plenty of curious things to be seen. Among these, the Edison exhibit, as the daily papers have already informed us, attracts, perhaps, the largest crowds. The special mark of the exhibit, which distinguishes it from afar, is a gigantic pyramid of incandescent lamps, containing ten or twelve thousand, which rises up to a height of sixteen or seventeen feet, and must present a brilliant appearance by night. At the foot of this monument to American ingenuity the crowd of visitors forms itself into a line, to take turns in listening to the phonograph, which forms a part of the same exhibit. Near this is a monstrous soap-bubble of glass, a yard and a half in diameter, perfectly clear and spherical, blown by compressed air at the watch-crystal manufactory of MM. Appert, and not far off is a block of mahogany, six and a half feet in diameter and thirteen feet high, weighing sixteen tons, perfectly solid, without crack or flaw; and beside this is a piece of ebony, twenty-two inches in diameter and six feet long, also perfect. In another department, an ingot of steel, weighing one hundred tons, nearly twenty-two feet high, and eight and one-half feet square at the base, is, perhaps, the most remarkable object; and the same makers, the Saint-Chamond Company, show also a forged-iron shaft with three angles, weighing twenty-two tons.

AN ARCHITECTURAL KNOCKABOUT.[1]—II.

AT Rotterdam I had a room directly over a beer-garden, the noise and smell from which were not altogether conducive to sound sleep. Rotterdam is uninteresting I think, save now and then its houses of nobility and its famous wharves or "*boomptjes*" as they call them.

It became much cooler on the way to Haarlem, and looking from the carriage-window I could see that the canals were rapidly freezing hard.—This was very encouraging as I had always been from infancy a warm admirer of the famous "Hans Brinker" story which had inflamed my fancy to skate upon the Dutch canals. Arriving at Haarlem I was much excited at the prospect of actually gliding over these frozen water-ways, and I then realized completely by the quaint surroundings that I was indeed in "furren parts." I spent a day in the ancient but grand old cathedral with its old windows and cannon-ball prominently but artistically stuck in the wall, and the great organ which was only played in summer, and then only for kings or American millionnaires,—as I was neither the one nor the other, it was not played for me.

I wandered through street after street, the houses presenting the same half-ruined appearance with their stepped gables and with invariably a café or "*bier huis*" underneath. I spent hours with Franz Hals in spite of the cold, doffed my hat to Rembrandt and his contemporaries, and sketched at every opportunity with blue and numbed hands. The bloused and sabotted Hollandais interested me greatly. It was all, in many respects, just as unique and strange as I wanted it to be, yet the faces, and even the dress were not different from our own—though in the country proper it is decidedly different.—I could have spent weeks, however, in poking in and out of its queer corners, crossing and recrossing its boat-loaded canals now firmly locked in an icy seal. Small boys were running through the streets with the ideal skates of my fancy, just as Hans Brinker had them in the story, and I was perfectly satisfied.

Having fully determined to skate upon the Dutch canals, it was comforting to think that these boys would try the ice and run the first chance of getting drowned before I entrusted my valuable life upon them. I inquired of a genial proprietress of a store (where I bought a pair of those curve-bladed skates) if it were possible to skate to Amsterdam? She replied that she thought it was, and remarked that it was seldom that "an Anglais" appeared there in winter and never on the canals.

I took great trouble to inform her that I wasn't an "Anglais" but a regular American. I endeavored to point out to her how the two nations differed, but met with so little success that when I left her, America meant South America to her and she probably placed me as living in the Brazilian mountains or among the wilds of Uruguay. After having expressed my bag to Amsterdam, to a hotel—the name of which suggested cheapness, I boldly sallied forth with my skates on my arm, and with a prayer to Heaven for necessary guidance and preservation on the great deep I followed an interested "small boy" who clogged on to the main canal, passed under the splendid city gate, and stepped onto the direct passage-way to bespired Amsterdam.

It was an ideal experience: for miles and miles a dead level of ice lay before me. The great, white, glistening, snake-like track stretched out circuitously as far as the eye could reach. Sitting down I calmly strapped on my clumsy "irons," and with my sketch books in my sling started off. Being a fair skater I attracted a great deal of attention by my school-boy antics, though the length and peculiarity of my skates somewhat interfered with my most scientific and favorite manœuvres. The natives skate well, slowly and steadily, with a beautiful swing, but with very little of our American "go." I bowled along freely, the air was glorious and invigorating and I found that the fair Hollandaise had no hesitation in asking me to skate with them. Indeed, at one time, I was literally seized by two great buxom lasses, one on each arm, and whirled along at a breathless speed.

The women, old and young, skate as well as the men, and I found

[1] Continued from No. 706, page 5.

that it was no easy task to skate with these females continuously. At every hundred yards or so there was a crossing where a man with a brush-broom swept the ice for a short space and levied or tried to levy a tax on all passing by. At first I was innocently taken in by the imposition, though I wondered if "Hans" did that. Finally,

after having paid nine different times I got tired and merely pointed back as if I had paid my tax at the last station, this seemed to satisfy these Dutch extortioners.

At every mile or so were small tents with chairs and a man or woman selling hot chocolate, madeira wine and little ginger cookies. These were very refreshing and I found myself continually stopping to try them. I constantly came upon new sights, now and then I would unsling my pack as I went bowling along towards Amsterdam, and take my sketch-books and make some rapid little drawings of an old windmill or quaint thatched farm-house. Arrived at Halfveg, I had to go from the canal for a little space, walking on my skates, and then onto the main way again, not before stopping, however, for more chocolate and ginger cookies.

Continuing my journey, steadily skating on through funny little villages built at the very water's edge of the canal, I at last came

in sight of the splendid city. Putting in all my remaining force I "spurted" in through the suburbs to the very heart of the town.

Leaving the canal I walked through the street in the gathering dusk to my hotel where I found my knapsack. I then, very tired and very happy at the thought of my novel experience, and the realization of one of my fondest dreams, had a good dinner and retired to sleep the sleep of the just and deserving.

On leaving Amsterdam I went by the way of Dordrecht and Utrecht, and in passing the Belgian frontier of course was confronted by the inevitable "*douane*." Not being at all used to these customs formalities and being a free-born American, not to say an inexperienced one, I did not see the use of these continual visitations which seemed to me to be sheer nonsense; so I very foolishly concluded on arriving at the frontier for the second time, that I wouldn't get out of the carriage and walk a long way to be locked up merely to have some ignorant official look through my poor little knapsack.

As I was neither importing salt nor tobacco, all this red tape appeared to me absurd. So every passenger but myself left the carriages and had his luggage overhauled according to law. As no one in authority interfered with me I laughed in a superior sort of a way thinking what a fortunate being I was, when they all returned, but to my surprise two very suspicious *gens d'armes* approached the

place where I was sitting and literally "yanked" me from the carriage, and went through every article I possessed before the smiling passengers. Not finding anything dutiable on my person, with a few words of Belgian warning in remarkably plain French, I was thrown back into the train a wiser if not a better man. After that I was generally the first one to have my baggage "searched."

F. L. V. Hoppin.

[To be continued.]

ITALIAN CITIES.[1]—VIII.

VERONA.—III.

In the church of Santa Maria in Organo, I must not forget to mention the choir, where we can see very interesting decorations of marquetry and colored woods, executed at the end of the fifteenth century by Fra Giovanni, of Verona, the music-desk richly carved and a walnut candelabra four metres high, for the paschal candle. The art of marquetry flourished in Italy from the thirteenth to the fifteenth century and gave birth to many works which are usually little remarked, not merely because they serve to ornament a part of the church least accessible to the public, but also because they exhibit a kind of beauty hardly understood by observers who are not *au courant* with the technical difficulties which they involve. In almost all the choirs of Italian churches built about this time there can still be admired such works, which possess a delicacy and originality far from common, and which bear witness that at that time the artists of the peninsula undertook to perfect and embellish every portion of a monument, and arrived at an inimitable degree of cultivation in every branch of art.

The Church of St. Anastasia is a curious model of the religious monuments of the thirteenth century. The façade, begun in 1261, has not been finished, as may be seen in many other Italian churches of that date, when the impulse was so vigorous in favor of enterprises of this kind that almost always it exceeded the material means at command for putting it into execution. The Gothic spirit nevertheless rules in this façade, whose single grand central doorway is almost finished. This doorway offers a peculiarity quite uncommon in the architecture of the time. It is composed of a great arch, whose pointed curve is hardly marked at the summit, so that it seems to indicate a kind of hesitation on the part of the architect between the full-centred Roman arch and the pointed arch of the North. The doorway is divided by a pilaster, upon which rest two interior arches which cut symmetrically the vacant space of the tympanum which is ornamented in fresco. The interior is composed of three naves

[1] Continued from page 248, No. 709.

supported by two rows of columns, twelve in each. Here we can remark amongst other things the very beautiful mausoleum of Cattaneo, 1565 — Corinthian in style — which Vassari, who was not always indulgent for his contemporaries, declares to be one of the most beautiful things which can be seen in all Italy. Neither must we forget to observe the singular bas-relief in terra-cotta of the fifteenth century, which depicts the principal events in the life of Jesus. It is a great panel with several compartments on which scenes from the evangels unroll themselves, and stand out with an incredible boldness of imagination.

Sculpture in terra-cotta is also one of the branches of art which people imperfectly educated consider of secondary rank, while by one who takes the trouble to analyze it and study its deserts to the bottom, there is acquired a conviction that the masters of this art have expended for its refining and perfecting as much of study and genius as painters and sculptors have expended in the production of the *chefs-d'œuvre* of brush and chisel.

The church of San Fermo Maggiore, which dates to the early years of the fourteenth century, forms one of the most individual types of Veronese architecture, which, composed of a mixture of foreign styles imported into upper Italy from the north and from the east, nevertheless wished to put on little by little a physiognomy of its own, original, almost autonomic. The bell-towers, arcades and mouldings are here found mixed in strange confusion, and the façade strikes with astonishment the observer who has been accustomed to find in the churches of this century the uniform aspect and conventional pattern imposed by professional pedantry. The door opens at the back of a full-centred porch masked by little columns. Then on both sides of the porch are arranged double ranges of arcades which envelop the design with an unwonted air of animation. Over the porch are four windows with pointed heads, and these windows in their turn are surmounted by a window of slightly pointed form divided into three parts by two colonnettes and flanked by two rose windows, which complete this bizarre architectural theme.

Before speaking of the other monuments of Verona, I cannot avoid speaking of the Church of San Bernardino, founded in 1451, which has for an annex the chapel of the Pellegrini, a very *chef-d'œuvre* of the famous San Micheli, built in Veronese stone, which, after marble, is the most precious of stones for the whiteness of its tint and fineness of its grain. The Church of San Bernardino possesses a cloister of severe majesty and imposing austerity, due especially to the simplicity of its design and the wise distribution of daylight through its arcades.

Besides this rich collection of churches, Verona possesses a beautiful series of palaces, the most interesting of which, from a decorative point-of-view if not from that of purity of style, are those built after the designs of San Micheli, all of which date from the first half of the sixteenth century. San Micheli, the Veronese architect, was one of the greatest artists of his age. He lived and worked in company with the most distinguished architects of his century, notably with Sansovino, Bramante, San Gallo, and Buonarotti. He was almost the equal of each of them, and no one of them was his equal in military architecture in which he excelled. We owe to him the invention of the triangular bastions which revolutionized the strategy of sieges. The fortifications of Verona, almost all still standing, perfectly preserve the type of these new works of defense due to his inventiveness. He had acquired such a reputation in this branch of his art that Pope Clement VII charged him, in company with San Gallo, with the inspection of all the fortified cities of the States of the Church. The Venetian Republic next employed him, and thus it is that, besides Verona, he fortified all the strongholds of Venetia, Dalmatia, Corfu and Candia. In those agitated centuries, where the security and the power of States rested wholly upon force, almost all the great architects were bound to understand how to put a city in condition for defense, and one of the most brilliant pages of the life of Michael Angelo is that where he was seen, at an already ripe age, presiding over the defense of Florence, his natal city.

In spite of the care which he was forced by circumstances to give to purely military works, San Micheli none the less consecrated his talents to the designing of edifices purely civil or religious, which would have been enough to assure him a great fame. The two altars of the Cathedral at Orvieto, the façade and dome of the Cathedral of Montefiascone in Central Italy, the Chapel of the Church of St. Anthony at Padua, and innumerable works which he left at Verona, palaces, church fronts, bridges, gateways and walls of fortifications, bear witness to his fecundity and the unheard-of variety of his information.

Among the palaces which are due to him I will cite in the first place the Palazzo Canossa, ornamented with a sub-basement in rustic work, and composed of a single story, the windows of which, framed in pilasters and surmounted by full-centred arches, are enriched at the summit with an ornamental moulding in the slightly *baroque* taste of the time. The attic, loaded with statues, which crowns the edifice, is of a later date, and only accentuates the incontestably *baroque* and heavy character of the monument.

The Palazzo Bevilacqua is conceived in a theme still more complicated and manneristic, for the rustic work of the basement is cut by a terrace which traverses the whole façade, and forms the base of the first story, whose windows, of great size, are divided by Corinthian columns, cannelated or *en torsade*, of sufficiently corrupt style. The windows of the lower story and those of the upper story are, moreover, overloaded with busts, statues and sculpture, which render the aspect very far from light, and the crowning of the façade is formed by a frieze and cornice very elaborately ornamented. One must go into the court-yard of the Palace of the Prefect if he wishes to find a model of charming and almost Classic architectural simplicity. Round about the court-yard ranges a portico formed by full-centred arcades supported by Corinthian columns of a very bold elongation. The first story is composed of a range of windows inframed in columns and with pointed arches, whose design harmonizes very successfully with the arches of the portico.

The court-yard of the Palace of the Tribunes is stamped with the same Classicism, only here the columns incline more towards the Byzantine standard, are more squat, rest on bases more massive, but on the other hand the arcades are more widely spaced, more attenuated, and consequently show more boldness and lightness.

The Palazzo Pozzoni is a model of elegance and distinction, although all the windows are not placed in symmetrical order. The general appearance of the façade has a very distinguished air, and the window which opens above the porte-cochère, as well as the one which is at its right, can be considered a very satisfactory specimen of the Greco-Gothic style which prevailed at Venice.

Finally, I cannot finish this summary review of the most beautiful palaces with which Verona is honored without mentioning the Palazzo del Consiglio, with its elegant terrace on the lower floor, its marble balustrade, its round-arched portico, its slender and distinguished columns and its four windows parted by colonnettes, and capped by a richly decorated entablature. All of these palaces have, in general, a sombre and severe air proper to the seigniorial habitations of that age, when every noble was a man exposed to the reprisals of factions, and where consequently a palace had to be at the same time a fortress as well as a place for pleasure, rest and repose; but, in general, the architects of this age of iron always succeeded in, so far as possible, disguising this prosaic side of their work. To-day the architect is no longer preoccupied with necessities of this kind; but, nevertheless, the palaces which are built cannot always rival in elegance and beauty those of the warlike feudal times.

In the centre of the Piazza del Seignori, which faces the Palazzo del Consiglio, stands the monument of Dante Alighieri, and in a corner we see rising up a superb Gothic tower. The statue of Dante is of white marble, and was sculptured by Ugo Zanoni, a Veronese artist. But the most eccentric place in Verona, and one might say of all Italy if he took care to except the Piazza of St. Mark at Venice, is that called della Erbe, formerly the forum of the Republic. The houses which surround it are almost all decorated in fresco. The monolithic column which rises at one end, bore, until 1797, the lion of St. Mark, a symbol of the subjugation of Verona to the Venetian Republic. At that time the French cast it down. The tribune, borne on four columns, which we see on the opposite side, formerly served as the stand of the judges charged with presiding at the punishment awarded to blasphemers, and whence they declared the death sentence. This place offers a very varied and very picturesque scene on market-days, when every dealer in fruit and vegetable shelters himself while selling his wares under a vast open umbrella. What we see, then, is a very forest of parasols, under which busies itself a swarm of human beings, and the murmur of voices which arise from every side only makes the scene more odd and animated.

Besides the statue of Dante we see in other parts of Verona the equestrian monument of Victor Emmanuel, the liberal king, whose statue is already erected in almost all the great cities of the kingdom; also the statue of San Micheli; and finally, that of Aleardo Aleardi, a conspirator and poet, born in Venice in 1815, persecuted by Austria, and kept prisoner in the fortress at Josefstadt with several other Italian patriots. Aleardi's poems, conceived in a collegiate style, are much liked and appreciated; and I must mention one of his poems in which he pictures in strong and vivid touches the desolate picture of the Roman Campagna, where malaria overwhelms each year its thousands of victims.

On quitting Verona we can cast a last glance at the tomb of Juliet, the authenticity of which it is just as well for the dreamer not to question if he desire to say with the grand English poet:

> "For here lies Juliet, and her beauty makes
> This vault a feasting presence full of light."

H. MEREU.

THE ILLUSTRATIONS

[Contributors are requested to send with their drawings full and adequate descriptions of the buildings, including a statement of cost.]

THE CITY-HALL, ALBANY, N. Y. MR. H. H. RICHARDSON, ARCHITECT.

[Gelatine Print, issued only with the Imperial Edition.]

OFFICE-BUILDING FOR F. L. AMES, ESQ., BOSTON, MASS. MESSRS. SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS, BOSTON, MASS.

THE Worcester *Spy* says that Norcross Brothers have just signed a six-hundred-and-twenty-five-thousand-dollar contract to build a twelve-story building for F. L. Ames, at the corner of Washington and Court Streets, Boston. It will be not only the tallest business block in the city, but one of the most striking architectural features of the picturesque old town. No adjacent building is more than five or six stories high, and more than one-half of the altitude of the building (184 feet) will tower with unobstructed view above everything else in the neighborhood. The Ames Block will have a frontage of seventy-eight feet on Washington Street, and ninety-three feet on Court Street. The first three stories will be of Milford granite, and the remaining nine stories of gray Ohio sandstone, a combination similar to that so much admired in the new building of the New York *Times*. The basement, ten feet high, will have square windows, but the first story, directly above, will be twenty-five feet high, and will be lighted on each side by three arched windows of generous dimensions. In the third story is a row of many arched windows of smaller size, and an elaborate cornice above completes the design of the granite section. In the fifth story above this there are large arched windows similar to those on the first floor. The windows of the topmost story are small arched windows, while those on all intervening stories are square. From foundation to roof the corner windows are set in continuous solid masonry that projects beyond the central portion of the structure and gives the effect of pilasters. Sculpture and mosaic will be used liberally on the exterior, and the interior finish will be worthy of marble and iron. The first floor is designed for banking-rooms, and there will be room for safe-deposit vaults in the basement.

THE SASSENPOORT, ZWOLLE, HOLLAND.

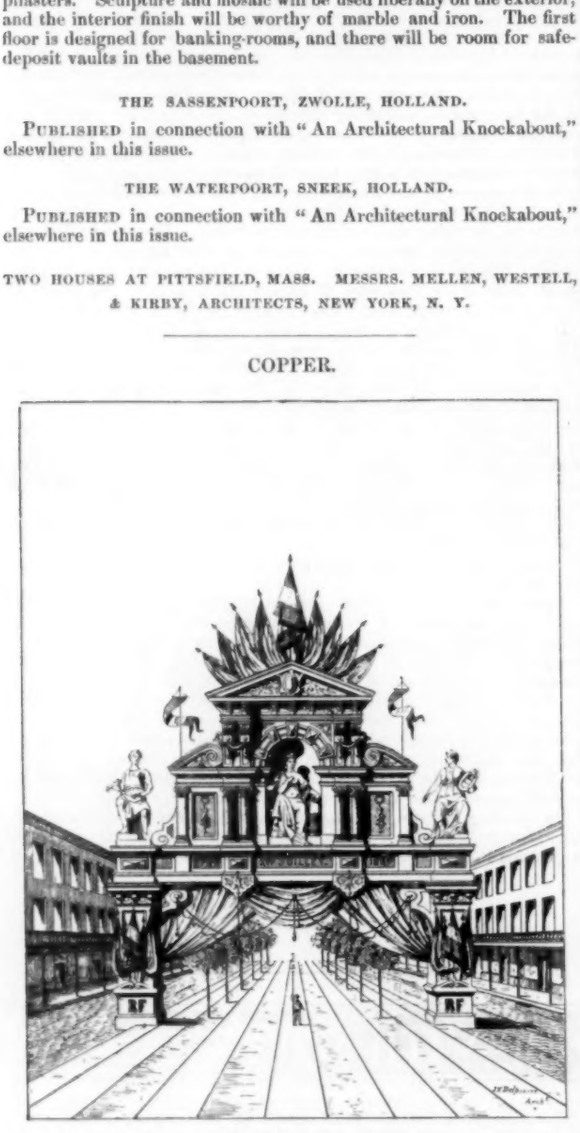
PUBLISHED in connection with "An Architectural Knockabout," elsewhere in this issue.

THE WATERPOORT, SNEEK, HOLLAND.

PUBLISHED in connection with "An Architectural Knockabout," elsewhere in this issue.

TWO HOUSES AT PITTSFIELD, MASS. MESSRS. MELLEN, WESTELL, & KIRBY, ARCHITECTS, NEW YORK, N. Y.

COPPER.



Triumphal Arch erected for the Celebration at New Orleans, La., of the taking of the Bastille.

A CORRESPONDENT of the Boston *Herald* offers the following readable communication:

"The amount of copper which is now accessible, the extent of the facilities for obtaining it and of the capital engaged, make it reasonably certain that the price of ingot copper will remain low for a long time. The low price of the raw material favors its increased consumption in the many uses to which it is, on account of its peculiar properties, preëminently adapted, in addition to those to which, for the same reason, it is indispensable. For example, for electrical use, it is indispensable, and the consumption of the metal in electrical industries will consequently be but little affected by the price in comparison with those industries which can effectively employ a substitute. It is better adapted for culinary ware, for conveying steam and for a multitude of uses in manufacturing than iron is, but the latter is so much cheaper as to outweigh the greater advantages of copper, at least in this country. In Europe, where cooking is an art, and economy of material and fuel and uniformity of products are expected, cooks will not use the clumsy black and greasy pots which have been handed down to our Irish kitchen-maids from the backwoods poverty of our ancestors. In all buildings where regard is had for solidity and permanence of construction, copper is used for roofing, for piping for steam, hot-water, etc. We have to be content with galvanized-iron for such uses. We are, however, producing copper in such quantities as to be able to send a surplus abroad and increase the opportunities of Europeans to use it by selling it to them at a lower price than to ourselves. This is, of course, a direct, though absurd and unexpected, result of the duty on copper. But when you add to the tariff its inevitable corollary, the manufacturers' combination, the use of copper, except in a few branches where it is indispensable, is almost prohibited. Before the metal can reach the coppersmith, who works it into the unlimited forms required for general use, it has to pass through the hands of the manufacturer, who rolls it into sheets or draws it into tubes, rods or wire.

"Thanks to the tariff, these gentlemen have combined together to maintain an artificial price and, as a result, to restrict consumption. For conveying steam and hot water it is superior to iron; first because smaller and lighter pipe can be used, angles and bends are more easily managed, and when in place, the piping is more workmanlike and durable; second, because the loss of heat by radiation is only a tenth of that of iron. Now the cost of copper pipe is out of all reasonable proportion to the cost of the raw material. The actual cost of manufacturing iron pipe from skelp averages six-tenths of one cent per pound, which includes all expenses of handling, shipping, sales and profits. To manufacture copper tubes from the ingot costs apparently more than twenty times as much, for if we take our copper to the pipe-makers at twelve cents a pound they will not let us have it back for less than twenty-five cents a pound. Yet copper exceeds iron in malleability, ductility and facility of working. Of course the consumption is trifling, and always will be so long as these men can keep their grip on it. It is easier to run up the price, and so restrict consumption, than it is to provide increased facilities to meet a greater consumption. You don't have to put out more capital, and you have an immediate greater profit. You don't have to worry about a home market; there isn't any to speak of, it is simply an affair of fixing the price to suit yourself, and letting consumers take the goods or go without them altogether. It is not a market where the buyer is always at the mercy of the seller. A few days ago bids were opened for roofing with copper the new court-house in this city. Among the bidders was one party who offered to do the work for a price averaging more than forty per cent less than his competitors. Being interested in any question affecting the use of copper, I made inquiries and found that the lower bidders, in order to get around the manufacturers of copper, had fitted up a mill, and now roll their own copper. Any of the others who are tribute payers under the sway of the monopoly would have had to pay heavily to it for the privilege of being allowed to do the work, in case the successful and independent firm had not bid. It would seem that this is a good example to follow, and consumers who have been looking in vain for signs of a home market, in which to buy without being robbed, had better get themselves in position to do without it, by obtaining the raw material and working it up themselves."

PIPING A HOUSE FOR GAS.

THE correspondence in our columns some months since on the piping of houses for the introduction of gas has induced the Gilbert & Barker Manufacturing Company to issue a circular which will be found to contain information which architects will do well to heed in preparing their specifications. As an appropriate sequence to the discussion we reproduce it at length below.

Ordinary wrought-iron pipe, such as is used for steam or water, is suitable and proper for all kinds of gas. Galvanized malleable iron fittings, in distinction from plain iron, are very superior. The coating of zinc inside and out effectually and permanently covers all blow-holes, makes the work solid and durable, and avoids the use of perishable cement. Before the pipe is placed in position it should be looked and blown through. It is not infrequent that it is obstructed, and this precaution will save much damage and annoyance. What is known as gas-fitters' cement never should be used. It cracks off easily, in warm places it will melt, and it can be dissolved by several different kinds of gas. Nothing but solid metals are admissible for confining gas of any kind. When pipes under floors run across floor timbers, the latter should be cut into near their ends, or where supported on partitions, in distinction from being cut in or near the centres of rooms. It is evident that a ten-inch timber notched two inches in the middle is no stronger than an eight-inch.

All branch outlet-pipes should be taken from the sides or tops of running lines. Bracket-pipes should run up from below, in distinction from dropping from overhead. Never drop a centre pipe from the bottom of a running line. Always take such outlet from the side of the pipe. The whole system of piping must be free from low places or traps, and decline toward the main rising pipe, which should run up in a partition as near the centre of the building as is practicable. It is obvious that where gas is distributed from the centre of a building, smaller running lines of pipe will be needed than when the main pipe runs up on one end. Hence, timbers will not require as deep cutting, and the flow of gas will be more regular and even. For the same reason in large buildings, more than one riser may be advisable. When a building has different heights of post, it is always better to have an independent rising pipe for each height of post, in distinction from dropping a system of piping from a higher to a lower post, and grading to a low point and establishing drip pipes. Drip-pipes in a building should always be avoided. The whole system of piping should be so arranged that any condensed gas will flow back through the system and into the service-pipe in the ground. All outlet pipes should be so securely and rigidly fastened in position that there will be no possibility of their moving when the gas fixtures are attached. Centre pipes should rest on a solid support fastened to the floor timbers near their tops. The pipe should be securely fastened to the support to prevent lateral movement. The drop pipe must be perfectly plumb, and pass through a guide fastened near the bottom of the timbers, which will keep them in position despite the assaults of lathers, masons, and others. In the absence of express directions to the contrary, outlets for brackets should generally be four feet and six inches high from the floor, excepting that it is usual to put them six feet in halls, and five feet in bath-rooms. The upright pipes should be plumb, so that the nipples that project through the walls will be level. The nipples should project not more than three-quarters of an inch from the face of the plastering. Laths and plaster together are usually three-fourths of an inch thick; hence, the nipples should project one and one-half inches from the face of the studding. Drop centre pipes should project one and one-half inches below the furring, or timbers if there be no furring, where it is known that there will be no stucco or centre-pieces used. Where centre-pieces are to be used, or where there is a doubt whether they will be or not, then the drop pipes should be left about a foot below the furring. All pipes being properly fastened, the drop pipe can be safely taken out and cut to the right length when gas-fixtures are put on. Gas pipes should never be placed on the bottoms of floor timbers that are to be lathed and plastered, because they are inaccessible in the contingency of leakage, or when alterations are desired, and gas-fixtures are insecure. The whole system of piping should be proved to be air and gas tight under a pressure of air that will raise a column of mercury six inches high in a glass tube. The pipes are either tight or they leak. There is no middle ground. If they are tight the mercury will not fall a particle. A piece of paper should be pasted on the glass tube, even with the mercury, to mark its height while the pressure is on. The system of piping should remain under test for at least a half-hour. It should be the duty of the person in charge of the construction of the building to thoroughly inspect the system of gas-fitting; surely as much so as to inspect any other part of the building. He should know from personal observation that these specifications are complied with. After being satisfied that the mercury does not fall, he should cause caps on the outlets to be loosened in different parts of the building, first loosening one to let some air escape, at the same time observing if the mercury falls, then tighten it and repeat the operation at other points. This plan will prove whether the pipes are free from obstruction or not. When he is satisfied that the whole work is properly and perfectly executed, he should give the workmen a certificate to that effect, and no job of gas-fitting should be considered complete until such certificate is issued. The following scale of sizes of pipes and number of burners to be supplied therefrom is found by experience to be best adapted for securing a good flow of common city gas, and it is very important that it be rigidly observed when machine or air gas is to be used. Do not confound fixture outlets with burners. In establishing the sizes of pipe in a building, count the number of burners that there will be on each outlet, and have the pipes of a size to correspond therewith.

Greatest Number of Feet to be Run.	Size of Pipe.	Greatest Number of Burners to be Supplied.
20 feet.	⅜ inch.	2
30 "	½ "	4
50 "	¾ "	15
70 "	1 "	25
100 "	1¼ "	40
150 "	1½ "	70
200 "	2 "	140
300 "	2½ "	225
400 "	3 "	300
500 "	4 "	500

BUILDING LAW.

AN OWNER'S RIGHT TO GIVE ORDERS.

REFERRING to the communication of Mr. C. E. Gardiner, in the *American Architect* for June 29, we agree with the editorial answer in that issue to the extent that the architect could not receive a commission for superintending the work in case he should voluntarily withdraw by reason of dissatisfaction at the owner's changing his mind; nor probably could he in such case recover damages for not being permitted to superintend the work according to the original plans. But we think he would have this remedy: he could decline to superintend the work any further, deliver the plans to the owner for his use, and then recover the reasonable value of the time and labor spent upon them. If these were complete, the usual three per cent could probably be collected; if incomplete, only a proportionate amount.

Of course the solution of this and all similar questions depends upon what in fact was the agreement between the architect and the owner; that is upon the exact nature of the architect's "retainer," to use a legal phrase. In general, however, the architect's undertaking is undoubtedly two-fold and divisible: he is in the first place to prepare the plans, specifications and details, which he is either to furnish outright to the owner as the latter's property, or, as is frequently the case, the owner is simply entitled to the use of the plans, the property in them remaining in the architect; in the second place he is to superintend the execution of the work according to these plans. We have no doubt that it is an implied condition of this contractual relation that the owner shall permit the work to proceed substantially as conceived by the architect, or at any rate there shall be no such deviations from the plans as would, to quote our correspondent's words, "ruin the design of the structure, even if it would not jeopardize the safety of the building." Now, of course, such an implied condition would not in law prevent the owner from doing as he chose with his own property; if he chose to throw over the architect's design and erect some architectural monstrosity, he undoubtedly would have the right to do so; the architect cannot interfere. But we think that such conduct on the part of the owner is clearly a breach of his implied undertaking with the architect, implied we mean as a matter-of-fact, and not by construction of law; and such breach, rendering the performance of the architect's contract as originally agreed upon impossible, would on general principles absolve the latter from further performance, and entitle him to compensation for what he had already done. This compensation would doubtless, as already pointed out, be fixed by a jury at the customary three per cent, or less in case the plans were not complete, or more in case of partial superintendence.

We think that if architects generally would pursue some such course as we have indicated, a salutary check would be placed upon the architectural willfulness of their clients, particularly building-committees.

RELEASE OF MECHANICS' LIENS.

BALTIMORE, MD., July 1, 1889.

Question. — *Please publish in the columns of your paper a blank form for "Release of Liens." Does this release from a contractor secure the owners against mechanics' liens?*

Yours truly, *C. E. Gardiner.*

Answer. — The following will do for a release from any single individual or firm, including the contractor:

"Know all men by these presents that in consideration of —— dollars paid by —— —— to ——, the receipt of which is hereby acknowledged, —— hereby release and discharge the following described premises of and from all liens or claim of lien which —— now have against the said premises or the buildings thereon by virtue of any work done or material furnished for the same. [Here insert description.]

"Witness —— hand and seal this —— day of —— 18—."

[Seal].

The release from a contractor would secure the owner against liens by him only; and the above form would not prevent the contractor from putting on a lien for work done subsequently to the execution of the release. If the agreement is that no lien shall be placed upon the premises for future work, a provision to that effect should be formally incorporated in the contract or in a separate instrument.

If the object is to get a release from the contractor's workmen and material-men, the above form can be used, changing the testimonial clause so it shall read as follows:

"In witness whereof we hereby set our hands this —— day of —— 18—, and adopt as our common seal that as hereto annexed." One seal will do for the whole; and of course all parties who may by any possibility have any lien should join.

COMMUNICATIONS.

[*The editors cannot pay attention to demands of correspondents who forget to give their names and addresses as guaranty of good faith; nor do they hold themselves responsible for opinions expressed by their correspondents.*]

SALTS ON THE SURFACES OF WALLS.

NEW YORK, N. Y., June 23, 1889.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs, — I have read many letters in your paper respecting the white salts that so often appear on the walls of buildings. Believing it to be a question of great importance, not only to owners of buildings, but also to architects and builders whose best efforts are oftentimes marred and ruined by the unsightly disfigurations and

destructive effects of the salts, I address you and give you my quarter of a century's experience and observation thereon.

It is a rare thing to see a building of brick or stone not subject, more or less, to this disfigurement. As to the elements of which these salts consist, they are so varied that scarcely any two samples are alike: specimens taken from the walls of the same building will differ.

The salts are contained in brick, stone, mortar and cement; they appear to exist in the largest proportion in cement, next in mortar, then in brick and the least in stone. I have seen them on stacks of new bricks in the brick-yards after rain had fallen upon them.

The *cause* of their appearance is wholly due to moisture in the masonry; this dissolves the salts, forming a weak brine, which, upon coming to the surface, loses its water by evaporation, and leaves the salt to crystallize and form the objectionable efflorescence; the loss of these soluble salts also greatly weakens the cement or mortar. But some of these salts, in a soluble form, are indispensably requisite for making good mortar and cement. If lime, silica, etc., were not in a soluble form in mortar and cement, the chemical changes and combinations necessary to produce their hardness and adhesiveness could not be effected: hence it will be seen that these salts are useful and necessary in their proper place, *i. e.*, *inside* the wall and *in* the cement or mortar, where in course of time they combine and form, by crystallization, strongly united and durable substances.

The question then arises, can the salts be retained within the walls and their objectionable appearance prevented? As water is the sole cause of the appearance of these salts, therefore the only remedy is to keep the walls dry: this can be accomplished by the proper application of a waterproofing substance that is not affected by the said salts, and as they have an alkaline reaction it follows that linseed oil, or any compound containing linseed oil or other vegetable oils cannot be successfully used, because as soon as the oil comes into contact with the salts it is saponified, becomes soluble in water and hence useless. This can be seen on any brick wall that has been painted shortly after erection, especially near the top where it is most exposed to the weather and consequently the wettest; the mortar joint is the first to throw off the paint, due to the caustic alkaline property of the lime hydrate. I know of no varnish, suitable for this purpose, that will resist the action of alkalies.

It is clear, then, that the remedy must consist in preventing rain-water from entering the walls of buildings by perfectly filling the interstices of the brick, stone, mortar, etc., with a substance or compound wholly unaffected by alkalies, water, gases, ordinary heat, cold or other atmospheric influences. If this can be effectually and permanently done, then the salts will not appear and cause those objectionable and destructive efflorescences. Such a compound would also preserve brown and other sand stone from the decay so noticeable on many of our finest buildings.

Robert M. Caffall.

NOTES & CLIPPINGS

How a One-armed Man Built His Own Home.—On Highland Avenue, Malden, stands a large and handsome stone house, which, having been in process of construction for the past four years, has at last arrived at completion, and is now pointed out by the inhabitants as a standing witness of what the skill and industry of one man, alone and unaided, can accomplish. The builder is a one-armed man, Mr. C. O. Blomerth, who has been a newsdealer in Malden for the past thirty-two years. When seen yesterday afternoon he related the story of the work as follows:

"In 1886 I started to build a house, and as I had previously built a small one alone, I determined to build a home for myself and family on which no labor but that of my own should be expended, and I have at last accomplished my task, the only help I have had being to have a man mix my mortar. The house is built of rough stones, of such a size that a single man could handle them, laid in red mortar, and is three stories high. The trimmings are of brick, and inside the stonework is a complete wooden frame house. The roof is made of roofing paper fastened together with a composition of my own, which is also used around the chimneys and in various other places instead of lead or tin. In the second year of the work, while busy near the roof, I fell a distance of thirty feet, and was so badly injured that I could do nothing more for a year. Of course, my one arm has been a severe drawback, but I have managed by various devices and a liberal use of nails, to get along very well. I have built all my own scaffolding, and put in without help the roof timbers. I paint everything thoroughly before putting it up, so that after finishing I have not had the trouble of stagings and ladders to paint high places. The house is large and commodious, and is filled with many odd little ideas of my own. It also contains some interesting relics; my front steps are taken from the Universalist Church here, and are the same steps that I set up on that church thirty-five years ago, when I had two hands."

Mr. Blomerth is a Swede by birth, and came to this country thirty-five years ago. He lost his right hand thirty-two years ago in a mill accident, and since that time has sold papers in Malden. He is a bright, energetic man, and now that he has a home proposes to rest and enjoy it.—*Boston Herald.*

Sugar in Steam-making.—The incrustation of steam-boilers has always been a matter of pressing importance to engineers, and many remedies have been proposed to obviate what is not only an inconvenience but often a source of danger. The incrustation is due to the mineral matter, chiefly lime, which is contained in all hard waters, and which is deposited on boiling, as we can see by looking into any kettle that has been in use for even a short time. A simple remedy has been tried by an Italian engineer, Colonel Potto, and it is said with complete success, in a boiler of twenty horse-power, containing 126 tubes. He introduced into the boiler every week two kilos. (about four and one-quarter pounds) of sugar, with the result that, after four months' continuous working, only a very thin film of incrustation was formed, and this was easily removed by simple washing. Without the treatment with sugar, the same boiler had previously become incrusted in a period of six weeks. The method has the merit of simplicity and cheapness, and many will therefore be disposed to test its efficacy.—*Chambers's Journal.*

Coal-dust Explosions.—Those who are inclined to be sceptical upon the subject of the combustibility of coal-dust will do well to note the recent explosion on board the steamer "*Eugene Pereire*" in the harbor of Marseilles. A heavy slip of coal occurred in one of the bunkers, which was open at the time, and a dense cloud of dust floated out and came in contact with the flame of a lamp in the stoke-hole. A terrible explosion ensued immediately, severely burning four stokers, one of whom afterwards died.—*Fire and Water.*

TRADE SURVEYS

Cereal estimates for the current year afford stock speculators and promoters of new enterprises a great latitude for new operations. Railroad investments this year will fall considerably under the limit of two hundred million dollars, and investments in manufacturing enterprises will considerably exceed three hundred millions. While less than the usual amount of railroad building will be done, more than the average amount of new land will be taken up for farming, mining and grazing purposes. While there is a great falling off in speculation, the increase in the volume of legitimate business is a matter of general comment. The number of forced sales are declining with reference to the volume of business done, and the amount of business done outside of banks is increasing. This year has been characterized by the great increase in the number of little business men and shop and factory proprietors. While mighty combinations are numerous, petty concerns are springing into existence at a greater rate than ever before known. Two causes are sometimes assigned for this: viz., the long and short haul clause, and the effect of industrial development in the South and railroad development in the trans-Mississippi region. Builders and building material men who supply material all over the United States say that there is a much greater activity in building in the far West than is generally supposed. Other authorities say that in the South there is an enormous expenditure of money for machinery, plants, equipments, boilers and engines. At this time, orders are in Northern machinery establishments for two or three million dollars' worth of machinery. These figures could be safely multiplied by five. There is a feverish contest between users of machinery. The machinery of greater capacity is driving out machinery of lesser capacity. In this way, a destruction of property in an economic sense is going on, the full effects of which are not always taken into account. Among the new Southern enterprises now in view are between twenty or thirty cotton-mills, four or five woolen-mills, four rolling-mills, eleven blast-furnaces, three thousand miles of projected roads, and small shops and manufacturing concerns too numerous to keep track of. In the Northwest territory, which is commercially tributary to Chicago, over twenty towns were started last year with a backing that promises to make young cities out of them in a few years. Country elevators are springing up. Railroad machine-shops are projected, to say nothing of stove and other foundries and shops of a hundred kinds. The manufacturing interests East are feeling the first influences of these rising centres. They promise to become valuable markets.

The price of land for agricultural purposes it is to be observed is increasing in four or five Western States. Some attribute this to lower freight rates, others to the growth of near-by markets, others to the general increase in demand; all causes contribute. The Northwestern agricultural interests are threatening to devote themselves too exclusively to one or two products as the South once did, but the success of our European and Asiatic competitors will soon give a strong hint to our enthusiastic farmers of the mistake they are about making in an economic sense. A greater diversification of farm labor is imperative. The South has learned the lesson. Theorists are urging ramie and flax culture and sugar-plant culture, and other specialties. No doubt that eventually our farming interests will see it to their advantage to act upon some of those suggestions, but the American way of doing things interferes with the easy adoption and enforcement of those wise little steps that in the long run count for so much. The market conditions are generally favorable; but little more gold will be exported. Exporting interests look for an equalization in accounts in products. Dry-goods are still imported very largely, and American textile interests are fairly employed, though the margins on common goods are so low as to tempt a restriction of output. Complaints of low prices come from a good many Southern mills, and critics advise their managers to escape from competition by turning out higher grades of goods; advice more easily given than acted upon. The boot and shoe interests have no cause of complaint which do not apply to almost any and every other industry. In specialties alone are there any profits. The machinery-makers have entered on the last half of the year with excellent profits, abundant orders and lower-priced material. The bridge-builders have orders out for twenty thousand tons of material to be erected during the next eight months. The rail-makers have begun to pick up good orders; the pipe-makers are busier than they have been for a year, and crude-iron is selling for 50 cents per ton more than two months ago. The great body of manufacturers are making preparations for an enlargement of capacity. Jobbers have ceased to fear a collapse of prices. There is confidence and faith on every hand, even as to railway matters. The iron-workers have gained their point. On the Alleghany Mountains the fifteen thousand miners are half-inclined to strike. In the block coal fields there is a good deal of suffering, but throughout the ranks of labor, generally, there is nothing more than the usual chronic causes for discontent. The leaders see and feel that there is too little compact organization for a general eight-hour strike. One railroad president has by a single edict rooted out labor organizations among thirty-five thousand employés. The fever has spent its force.

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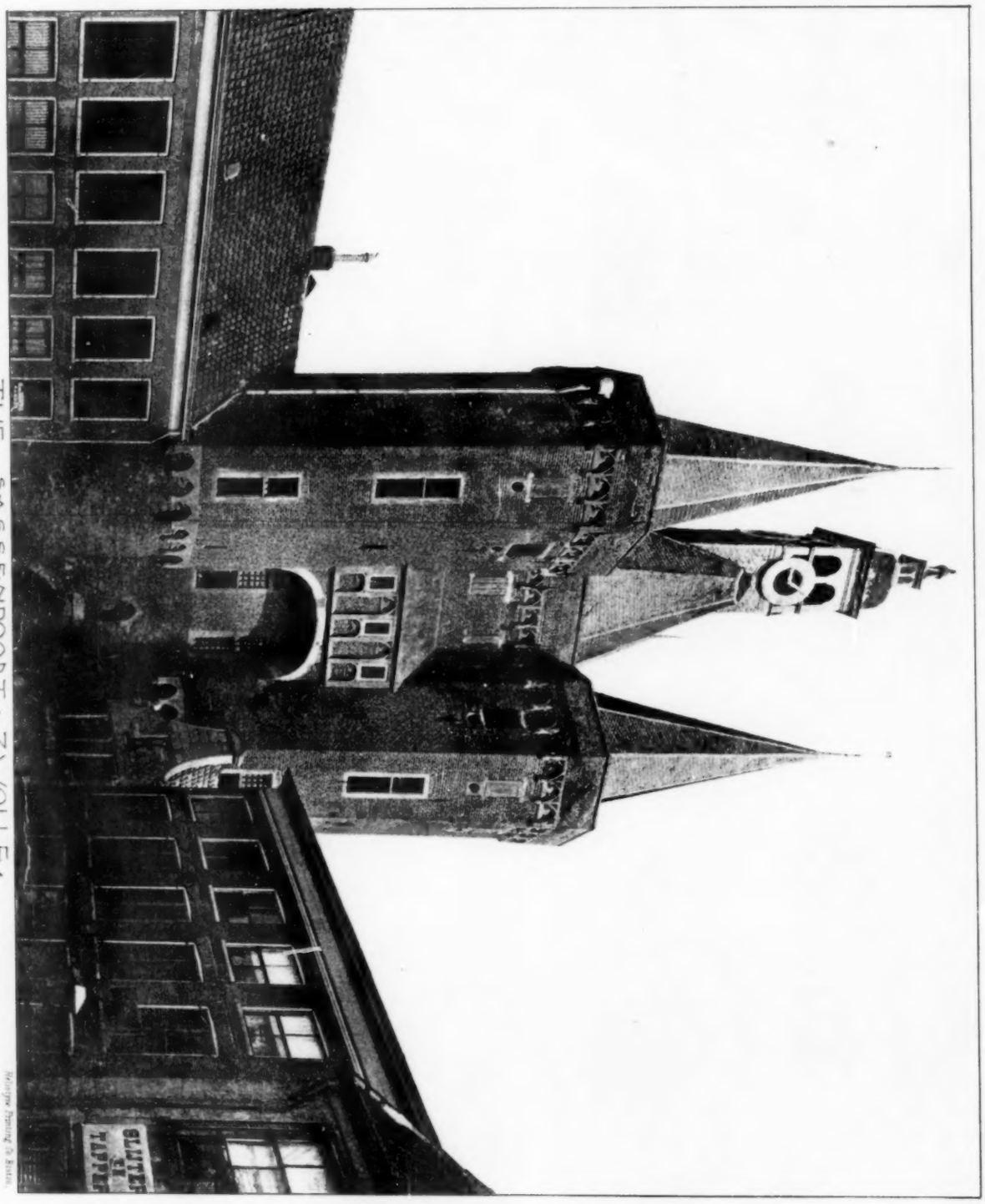

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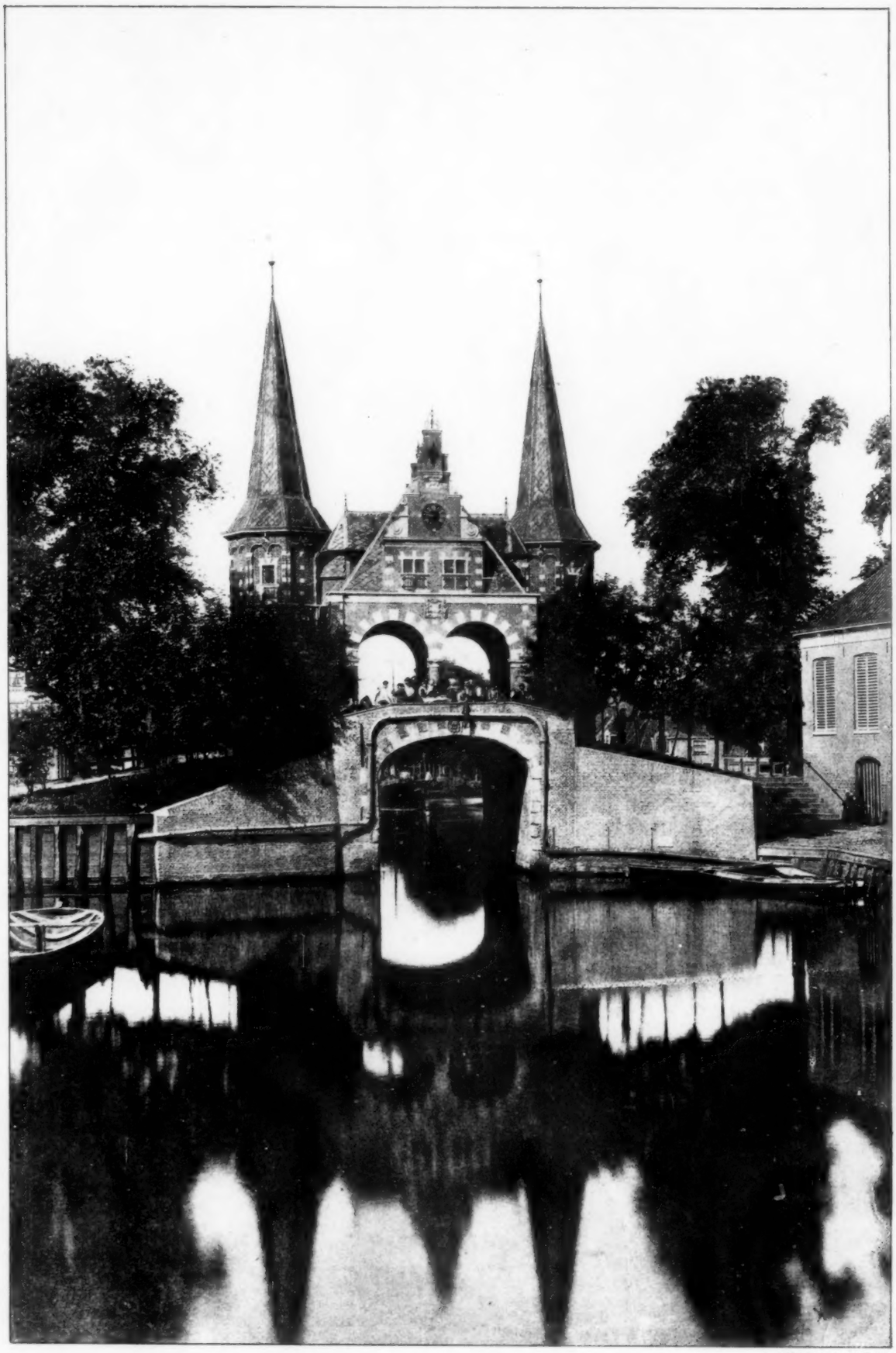

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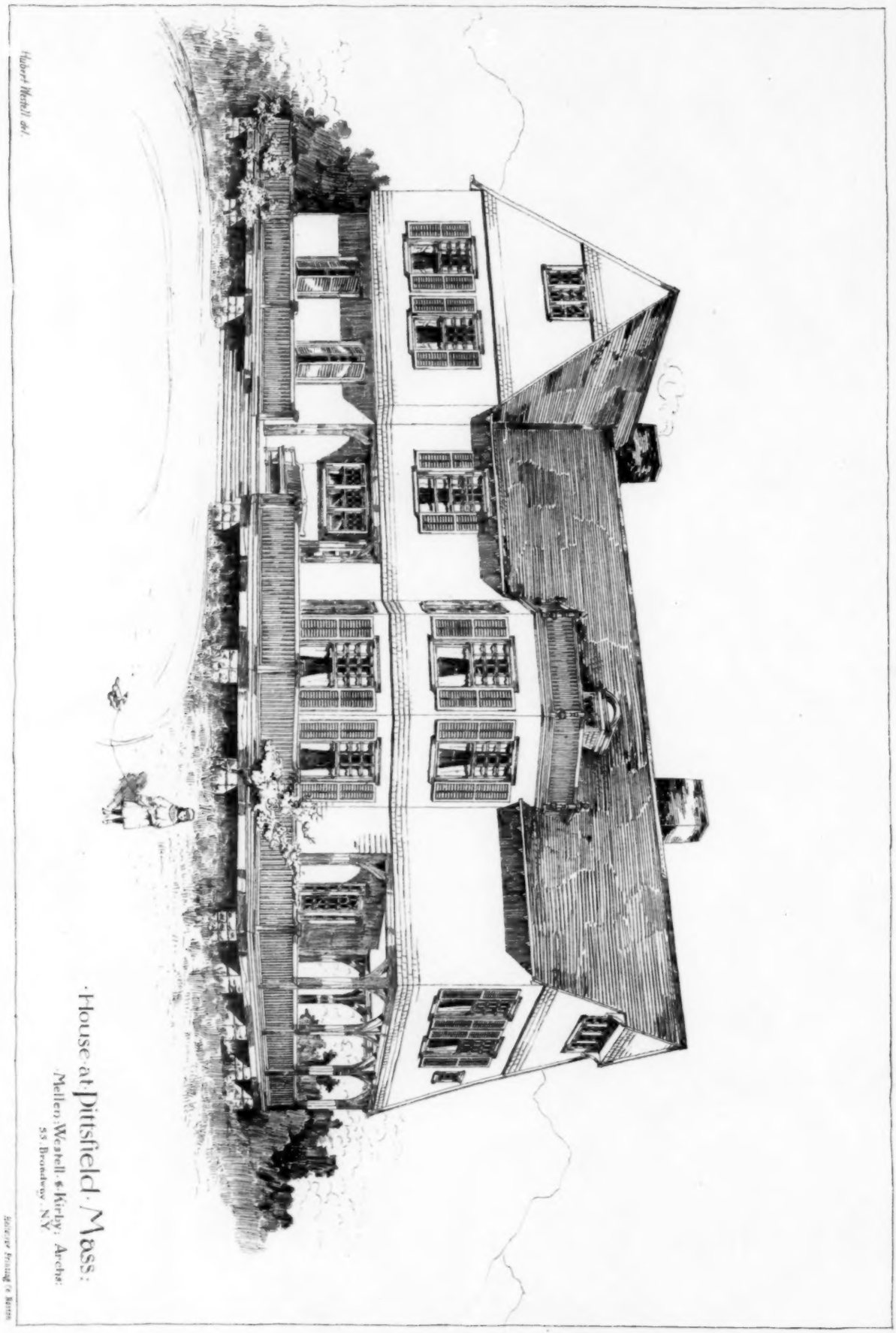

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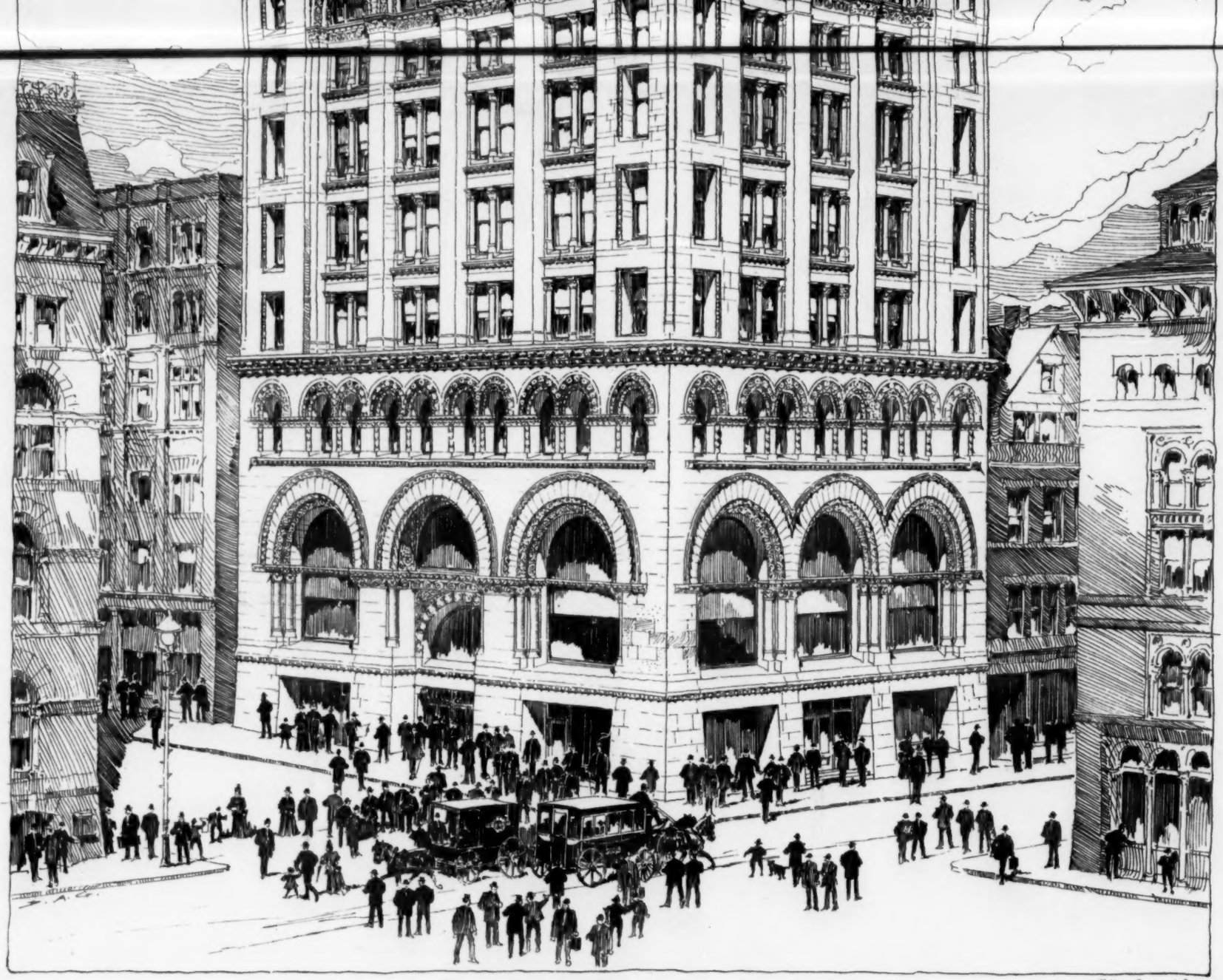

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